
**Lake Thunderbird TMDL Monitoring Plan Implementation:
Sample Year (SY) 2020- January Report**



SY2020 Monthly Report

Lake Thunderbird TMDL Monitoring Plan Implementation:

January 2021 Monitoring Report

Oklahoma Water Resources Board
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SUMMARY OF JANUARY WATER QUALITY SAMPLING

Sampling for January 2021 occurred on the twenty-fifth and was considered an above normal flow collection. Water samples and discharge measurements were collected at all ten locations. Mesonet data shows 0.68 inches of precipitation on the twenty-fifth, 0.16 inches of precipitation in the 72 hours prior to sampling, and no precipitation in the 72 hours after the sampling event. The total rainfall amount in Norman for the month of January was 1.86 inches. All water level gauges were operational for the month, except for LT-1 and UDB-1 due to equipment malfunction.

RESULTS

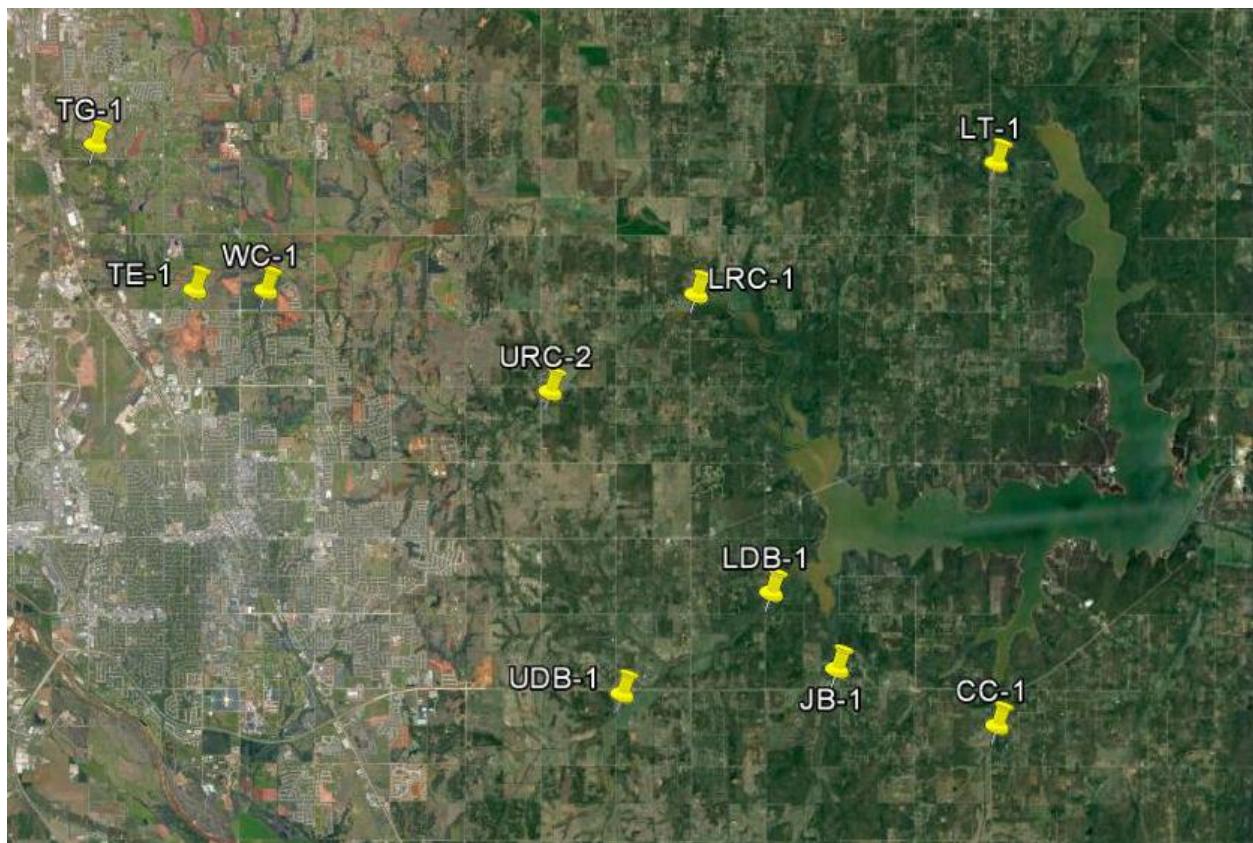


Figure 1 Monitoring Station Map

Monitoring Location ID	Monitoring Location Name	Date	Time	Field Crew	Water Temperature (°C)	Dissolved Oxygen (DO) (mg/l)	pH	Specific Conductance (mS/cm)	Turbidity (NTU)	Notes
CC-1	Clear Creek	1/25/2021	10:40	SD	9.77	10.08	7.90	624	38	After flow td (rp1) 21.09
JB-1	Jim Blue Creek	1/25/2021	11:55	SD	8.71	9.88	7.80	755	10	Neither rp over water, orifice in water, visible flow, dcp battery dead
LDB-1	Lower Dave Blue Creek	1/25/2021	12:55	SD	9.12	10.10	8.05	718	106	After flow td= 16.96
LRC-1	Lower Rock Creek	1/25/2021	15:20	SD	9.62	10.53	8.02	405	172	After flow td= 18.73, battery may be dying
LT-1	Lake Laterals	1/25/2021	14:20	SD	9.75	9.23	7.69	362	15	No dcp, visible flow on upstream, lots of filamentous on upstream
TE-1	Little River Tributary	1/25/2021	16:55	SD	9.39	10.71	7.93	370	249	Two small beaver dams upstream of bridge, water running over
TG-1	Little River Tributary	1/25/2021	17:30	SD	9.21	10.75	8.02	376	91	After flow td= 9.61
UDB-1	Upper Dave Blue Creek	1/25/2021	8:50	SD	8.56	10.73	7.91	357	224	After flow td= 18.17, battery dead so dcp had not recorded since 12/12
URC-2	Upper Rock Creek	1/25/2021	15:50	SD	8.78	10.51	7.98	332	178	After flow td= 12.15 (rp2)
WC-1	Woodcrest Creek	1/25/2021	16:30	SD	9.62	10.70	8.03	394	64	

Table 1 Field Data Form

Monitoring Location ID	Monitoring Location Name	Nitrate and Nitrite (mg/l)	Kjeldahl Nitrogen (mg/l)	Phosphorus (mg/l)	Total Suspended Solids (mg/l)
CC-1	Clear Creek	0.23	0.55	0.077	34
JB-1	Jim Blue Creek	<0.05	0.39	0.028	8
LDB-1	Lower Dave Blue Creek	0.12	0.65	0.094	90
LRC-1	Lower Rock Creek	0.22	1.12	0.158	104
LT-1	Lake Laterals	<0.05	0.61	0.046	14
TE-1	Little River Tributary	0.43	1.07	0.204	160
TG-1	Little River Tributary	0.45	1.17	0.256	66
UDB-1	Upper Dave Blue Creek	0.26	1.03	0.192	170
URC-2	Upper Rock Creek	0.22	1.45	0.235	90
WC-1	Woodcrest Creek	0.29	1.20	0.221	48

Table 2 Laboratory Analysis Summary

Monitoring Location Name	Nitrate and Nitrite (mg/l)	Kjeldahl Nitrogen (mg/l)	Phosphorus (mg/l)	Total Suspended Solids (mg/l)
Field Blank	<0.05	<0.10	<0.010	<5.0
Duplicate	0.24	0.57	0.078	30
Duplicate RPD	4.26%	3.57%	1.29%	12.50%*

Table 3 QA/QC Data Where the Asterisk Denotes RPD2

Quality assurance/quality control (QA/QC) of the data includes a field blank and duplicate sample from each collection event and is qualified by the OWRB. Relative Percent Difference (RPD) of the duplicate sample can be categorized into four levels, where Level 1 likely has no QA issues and Level 4 has major QA issues, and should be used with caution.

Monitoring Location ID	Monitoring Location Name	Discharge (cfs)	Stream Stage (ft)
CC-1	Clear Creek	1.98	21.11
JB-1	Jim Blue Creek	1.29	N/A
LDB-1	Lower Dave Blue Creek	22.63	16.93
LRC-1	Lower Rock Creek	14.42	18.76
LT-1	Lake Laterals	2.90	4.93
TE-1	Little River Tributary	3.42	11.56
TG-1	Little River Tributary	20.93	9.63
UDB-1	Upper Dave Blue Creek	18.52	18.29
URC-2	Upper Rock Creek	7.00	12.16
WC-1	Woodcrest Creek	5.91	8.24

Table 4 Station Discharge Summary

Discharge Measurement Summary

Date Generated: Wed Jan 27 2021

File Information				Site Details								
File Name		CC0125.WAD		Site Name								
Start Date and Time		2021/01/25 11:46:27		Operator(s)								
System Information		Units (English Units)		Discharge Uncertainty								
Sensor Type	FlowTracker	Distance	ft	Category	ISO	Stats						
Serial #	P4709	Velocity	ft/s	Accuracy	1.0%	1.0%						
CPU Firmware Version	3.9	Area	ft^2	Depth	0.4%	2.1%						
Software Ver	2.30	Discharge	cfs	Velocity	1.4%	5.1%						
Mounting Correction	0.0%			Width	0.1%	0.1%						
				Method	2.2%	-						
				# Stations	2.5%	-						
				Overall	3.8%	5.6%						
Summary												
Averaging Int.	40	# Stations	20									
Start Edge	LEW	Total Width	10.000									
Mean SNR	34.3 dB	Total Area	6.637									
Mean Temp	48.85 °F	Mean Depth	0.664									
Disch. Equation	Mid-Section	Mean Velocity	0.2984									
		Total Discharge	1.9809									
Supplemental Data												
#	Time	Location	Gauge Height	Rated Flow	Comments							
1	Mon Jan 25 12:04:37 CST 2021	9.500	21.110									
Measurement Results												
St	Clock	Loc	Method	Depth	%Dep	MeasD	Vel	CorrFact	MeanV	Area	Flow	%Q
0	11:46	0.00	None	0.000	0.0	0.0	0.0000	1.00	0.0000	0.000	0.0000	0.0
1	11:46	0.50	0.6	0.500	0.6	0.200	0.0003	1.00	0.0003	0.250	0.0001	0.0
2	11:47	1.00	0.6	0.600	0.6	0.240	0.0013	1.00	0.0013	0.300	0.0004	0.0
3	11:48	1.50	0.6	0.500	0.6	0.200	0.3606	1.00	0.3606	0.250	0.0901	4.6
4	11:49	2.00	0.6	0.500	0.6	0.200	0.4718	1.00	0.4718	0.250	0.1179	6.0
5	11:50	2.50	0.6	0.500	0.6	0.200	0.5003	1.00	0.5003	0.250	0.1251	6.3
6	11:51	3.00	0.6	0.500	0.6	0.200	0.5751	1.00	0.5751	0.250	0.1438	7.3
7	11:52	3.50	0.6	0.400	0.6	0.160	0.6217	1.00	0.6217	0.200	0.1243	6.3
8	11:53	4.00	0.6	0.600	0.6	0.240	0.6214	1.00	0.6214	0.300	0.1864	9.4
9	11:54	4.50	0.6	0.700	0.6	0.280	0.5338	1.00	0.5338	0.350	0.1869	9.4
10	11:55	5.00	0.6	0.750	0.6	0.300	0.4747	1.00	0.4747	0.375	0.1780	9.0
11	11:56	5.50	0.6	0.900	0.6	0.360	0.5571	1.00	0.5571	0.450	0.2507	12.7
12	11:57	6.00	0.6	1.000	0.6	0.400	0.4518	1.00	0.4518	0.500	0.2259	11.4
13	11:58	6.50	0.6	1.000	0.6	0.400	0.3274	1.00	0.3274	0.500	0.1637	8.3
14	11:59	7.00	0.6	1.000	0.6	0.400	0.2536	1.00	0.2536	0.500	0.1268	6.4
15	12:00	7.50	0.6	0.900	0.6	0.360	0.0856	1.00	0.0856	0.450	0.0385	1.9
16	12:01	8.00	0.6	0.900	0.6	0.360	0.1345	1.00	0.1345	0.450	0.0605	3.1
17	12:02	8.50	0.6	0.900	0.6	0.360	0.0023	1.00	0.0023	0.450	0.0010	0.1
18	12:03	9.00	0.6	0.750	0.6	0.300	-0.0699	1.00	-0.0699	0.563	-0.0393	-2.0
19	12:03	10.00	None	0.000	0.0	0.0	0.0000	1.00	0.0000	0.000	0.0000	0.0

Rows in italics indicate a QC warning. See the Quality Control page of this report for more information.

Figure 2 Discharge Measurement Summary CC-1

Discharge Measurement Summary

Date Generated: Tue Jan 26 2021

File Information				Site Details								
File Name		UDB0125.WAD		Site Name								
Start Date and Time		2021/01/25 10:12:01		Operator(s)								
System Information		Units (English Units)		Discharge Uncertainty								
Sensor Type	FlowTracker	Distance	ft	Category								
Serial #	P4709	Velocity	ft/s	ISO								
CPU Firmware Version	3.9	Area	ft^2	Stats								
Software Ver	2.30	Discharge	cfs	Accuracy								
Mounting Correction	0.0%			Depth								
Summary				1.0% 1.0%								
Averaging Int.	40	# Stations	29	0.1% 1.5%								
Start Edge	LEW	Total Width	17.000	1.3% 2.9%								
Mean SNR	40.0 dB	Total Area	24.275	0.1% 0.1%								
Mean Temp	46.54 °F	Mean Depth	1.428	1.9% -								
Disch. Equation	Mid-Section	Mean Velocity	0.7628	# Stations 1.8%								
		Total Discharge	18.5161	Overall 3.0% 3.4%								
Supplemental Data												
#	Time	Location	Gauge Height	Rated Flow	Comments							
1	Mon Jan 25 10:43:56 CST 2021	17.000	18.290									
Measurement Results												
St	Clock	Loc	Method	Depth	%Dep	MeasD	Vel	CorrFact	MeanV	Area	Flow	%Q
0	10:12	0.00	None	0.000	0.0	0.0	0.0000	1.00	0.0000	0.000	0.0000	0.0
1	<i>10:12</i>	<i>1.00</i>	<i>0.6</i>	<i>0.700</i>	<i>0.6</i>	<i>0.280</i>	<i>-0.1667</i>	<i>1.00</i>	<i>-0.1667</i>	<i>0.700</i>	<i>-0.1167</i>	<i>-0.6</i>
2	<i>10:13</i>	<i>2.00</i>	<i>0.6</i>	<i>1.000</i>	<i>0.6</i>	<i>0.400</i>	<i>-0.1033</i>	<i>1.00</i>	<i>-0.1033</i>	<i>1.000</i>	<i>-0.1033</i>	<i>-0.6</i>
3	<i>10:14</i>	<i>3.00</i>	<i>0.6</i>	<i>1.200</i>	<i>0.6</i>	<i>0.480</i>	<i>0.0725</i>	<i>1.00</i>	<i>0.0725</i>	<i>1.200</i>	<i>0.0870</i>	<i>0.5</i>
4	<i>10:15</i>	<i>4.00</i>	<i>0.6</i>	<i>1.500</i>	<i>0.6</i>	<i>0.600</i>	<i>0.2024</i>	<i>1.00</i>	<i>0.2024</i>	<i>1.500</i>	<i>0.3036</i>	<i>1.6</i>
5	<i>10:18</i>	<i>5.00</i>	<i>0.6</i>	<i>1.700</i>	<i>0.6</i>	<i>0.680</i>	<i>0.4167</i>	<i>1.00</i>	<i>0.4167</i>	<i>1.700</i>	<i>0.7084</i>	<i>3.8</i>
6	<i>10:19</i>	<i>6.00</i>	<i>0.6</i>	<i>1.900</i>	<i>0.6</i>	<i>0.760</i>	<i>0.9272</i>	<i>1.00</i>	<i>0.9272</i>	<i>1.425</i>	<i>1.3212</i>	<i>7.1</i>
7	<i>10:22</i>	<i>6.50</i>	<i>0.6</i>	<i>1.800</i>	<i>0.6</i>	<i>0.720</i>	<i>1.0787</i>	<i>1.00</i>	<i>1.0787</i>	<i>0.900</i>	<i>0.9708</i>	<i>5.2</i>
8	<i>10:20</i>	<i>7.00</i>	<i>0.6</i>	<i>1.800</i>	<i>0.6</i>	<i>0.720</i>	<i>1.3451</i>	<i>1.00</i>	<i>1.3451</i>	<i>0.900</i>	<i>1.2105</i>	<i>6.5</i>
9	<i>10:23</i>	<i>7.50</i>	<i>0.6</i>	<i>1.900</i>	<i>0.6</i>	<i>0.760</i>	<i>1.7405</i>	<i>1.00</i>	<i>1.7405</i>	<i>0.950</i>	<i>1.6534</i>	<i>8.9</i>
10	<i>10:24</i>	<i>8.00</i>	<i>0.6</i>	<i>1.800</i>	<i>0.6</i>	<i>0.720</i>	<i>1.8304</i>	<i>1.00</i>	<i>1.8304</i>	<i>0.900</i>	<i>1.6472</i>	<i>8.9</i>
11	<i>10:25</i>	<i>8.50</i>	<i>0.6</i>	<i>2.000</i>	<i>0.6</i>	<i>0.800</i>	<i>1.7799</i>	<i>1.00</i>	<i>1.7799</i>	<i>1.000</i>	<i>1.7799</i>	<i>9.6</i>
12	<i>10:27</i>	<i>9.00</i>	<i>0.6</i>	<i>1.800</i>	<i>0.6</i>	<i>0.720</i>	<i>1.7802</i>	<i>1.00</i>	<i>1.7802</i>	<i>0.900</i>	<i>1.6020</i>	<i>8.7</i>
13	<i>10:28</i>	<i>9.50</i>	<i>0.6</i>	<i>2.000</i>	<i>0.6</i>	<i>0.800</i>	<i>1.1184</i>	<i>1.00</i>	<i>1.1184</i>	<i>1.000</i>	<i>1.1184</i>	<i>6.0</i>
14	<i>10:29</i>	<i>10.00</i>	<i>0.6</i>	<i>1.900</i>	<i>0.6</i>	<i>0.760</i>	<i>1.0502</i>	<i>1.00</i>	<i>1.0502</i>	<i>0.950</i>	<i>0.9977</i>	<i>5.4</i>
15	<i>10:30</i>	<i>10.50</i>	<i>0.6</i>	<i>1.400</i>	<i>0.6</i>	<i>0.560</i>	<i>1.2697</i>	<i>1.00</i>	<i>1.2697</i>	<i>0.700</i>	<i>0.8887</i>	<i>4.8</i>
16	<i>10:31</i>	<i>11.00</i>	<i>0.6</i>	<i>1.500</i>	<i>0.6</i>	<i>0.600</i>	<i>0.9984</i>	<i>1.00</i>	<i>0.9984</i>	<i>0.750</i>	<i>0.7488</i>	<i>4.0</i>
17	<i>10:32</i>	<i>11.50</i>	<i>0.6</i>	<i>1.500</i>	<i>0.6</i>	<i>0.600</i>	<i>1.0732</i>	<i>1.00</i>	<i>1.0732</i>	<i>0.750</i>	<i>0.8049</i>	<i>4.3</i>
18	<i>10:33</i>	<i>12.00</i>	<i>0.6</i>	<i>1.600</i>	<i>0.6</i>	<i>0.640</i>	<i>0.7405</i>	<i>1.00</i>	<i>0.7405</i>	<i>0.800</i>	<i>0.5924</i>	<i>3.2</i>
19	<i>10:34</i>	<i>12.50</i>	<i>0.6</i>	<i>1.400</i>	<i>0.6</i>	<i>0.560</i>	<i>0.4839</i>	<i>1.00</i>	<i>0.4839</i>	<i>0.700</i>	<i>0.3387</i>	<i>1.8</i>
20	<i>10:35</i>	<i>13.00</i>	<i>0.6</i>	<i>1.600</i>	<i>0.6</i>	<i>0.640</i>	<i>0.3589</i>	<i>1.00</i>	<i>0.3589</i>	<i>0.800</i>	<i>0.2872</i>	<i>1.6</i>
21	<i>10:36</i>	<i>13.50</i>	<i>0.6</i>	<i>1.500</i>	<i>0.6</i>	<i>0.600</i>	<i>0.3937</i>	<i>1.00</i>	<i>0.3937</i>	<i>0.750</i>	<i>0.2953</i>	<i>1.6</i>
22	<i>10:37</i>	<i>14.00</i>	<i>0.6</i>	<i>1.300</i>	<i>0.6</i>	<i>0.520</i>	<i>0.4695</i>	<i>1.00</i>	<i>0.4695</i>	<i>0.650</i>	<i>0.3051</i>	<i>1.6</i>
23	<i>10:38</i>	<i>14.50</i>	<i>0.6</i>	<i>1.300</i>	<i>0.6</i>	<i>0.520</i>	<i>0.5108</i>	<i>1.00</i>	<i>0.5108</i>	<i>0.650</i>	<i>0.3320</i>	<i>1.8</i>
24	<i>10:39</i>	<i>15.00</i>	<i>0.6</i>	<i>1.300</i>	<i>0.6</i>	<i>0.520</i>	<i>0.3556</i>	<i>1.00</i>	<i>0.3556</i>	<i>0.650</i>	<i>0.2311</i>	<i>1.2</i>
25	<i>10:40</i>	<i>15.50</i>	<i>0.6</i>	<i>1.300</i>	<i>0.6</i>	<i>0.520</i>	<i>0.2464</i>	<i>1.00</i>	<i>0.2464</i>	<i>0.650</i>	<i>0.1601</i>	<i>0.9</i>
26	<i>10:41</i>	<i>16.00</i>	<i>0.6</i>	<i>1.100</i>	<i>0.6</i>	<i>0.440</i>	<i>0.2644</i>	<i>1.00</i>	<i>0.2644</i>	<i>0.550</i>	<i>0.1454</i>	<i>0.8</i>
27	<i>10:42</i>	<i>16.50</i>	<i>0.6</i>	<i>1.200</i>	<i>0.6</i>	<i>0.480</i>	<i>0.2425</i>	<i>1.00</i>	<i>0.2425</i>	<i>0.600</i>	<i>0.1455</i>	<i>0.8</i>
28	<i>10:42</i>	<i>17.00</i>	<i>None</i>	<i>1.000</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0000</i>	<i>1.00</i>	<i>0.2425</i>	<i>0.250</i>	<i>0.0606</i>	<i>0.3</i>

Rows in italics indicate a QC warning. See the Quality Control page of this report for more information.

Figure 3 Discharge Measurement Summary UDB-1

Discharge Measurement Summary

Date Generated: Wed Jan 27 2021

File Information			Site Details									
File Name	JB0125.WAD		Site Name	JB								
Start Date and Time		2021/01/25 13:04:11	Operator(s)	SCD								
System Information		Units (English Units)		Discharge Uncertainty								
Sensor Type	FlowTracker	Distance	ft	Category	ISO							
Serial #	P4709	Velocity	ft/s	Accuracy	1.0%							
CPU Firmware Version	3.9	Area	ft^2	Depth	0.7%							
Software Ver	2.30	Discharge	cfs	Velocity	1.4%							
Mounting Correction	0.0%			Width	0.2%							
				Method	3.3%							
				# Stations	5.8%							
				Overall	6.9% 9.6%							
Summary												
Averaging Int.	40	# Stations	9									
Start Edge	LEW	Total Width	4.000									
Mean SNR	28.6 dB	Total Area	2.100									
Mean Temp	47.03 °F	Mean Depth	0.525									
Disch. Equation	Mid-Section	Mean Velocity	0.6152									
		Total Discharge	1.2920									
Measurement Results												
St	Clock	Loc	Method	Depth	%Dep	MeasD	Vel	CorrFact	MeanV	Area	Flow	%Q
0	13:04	0.00	None	0.400	0.0	0.0	0.0000	1.00	0.0030	0.100	0.0003	0.0
<i>1</i>	<i>13:04</i>	<i>0.50</i>	<i>0.6</i>	<i>0.600</i>	<i>0.6</i>	<i>0.240</i>	<i>0.0030</i>	<i>1.00</i>	<i>0.0030</i>	<i>0.300</i>	<i>0.0009</i>	<i>0.1</i>
2	<i>13:05</i>	<i>1.00</i>	<i>0.6</i>	<i>0.600</i>	<i>0.6</i>	<i>0.240</i>	<i>0.5371</i>	<i>1.00</i>	<i>0.5371</i>	<i>0.300</i>	<i>0.1611</i>	<i>12.5</i>
3	13:06	1.50	0.6	0.600	0.6	0.240	1.0033	1.00	1.0033	0.300	0.3010	23.3
<i>4</i>	<i>13:07</i>	<i>2.00</i>	<i>0.6</i>	<i>0.600</i>	<i>0.6</i>	<i>0.240</i>	<i>0.8885</i>	<i>1.00</i>	<i>0.8885</i>	<i>0.300</i>	<i>0.2666</i>	<i>20.6</i>
5	13:08	2.50	0.6	0.600	0.6	0.240	0.9846	1.00	0.9846	0.300	0.2954	22.9
6	13:09	3.00	0.6	0.500	0.6	0.200	0.8763	1.00	0.8763	0.250	0.2191	17.0
7	13:10	3.50	0.6	0.500	0.6	0.200	0.1903	1.00	0.1903	0.250	0.0476	3.7
8	13:10	4.00	None	0.000	0.0	0.0	0.0000	1.00	0.0000	0.000	0.0000	0.0

Rows in italics indicate a QC warning. See the Quality Control page of this report for more information.

Figure 4 Discharge Measurement Summary JB-1

Station Number:
Station Name: LDB

Meas. No: 0
Date: 01/25/2021

Party: Jtw scd	Width: 40.0 ft	Processed by:
Boat/Motor:	Area: 122 ft ²	Mean Velocity: 0.185 ft/s
Gage Height: 16.93 ft	G.H.Change: 0.000 ft	Discharge: 22.6 ft ³ /s
Area Method: Avg. Course	ADCP Depth: 0.269 ft	Index Vel.: 0.00 ft/s Rating No.: 1
Nav. Method: Bottom Track	Shore Ens.: 10	Adj.Mean Vel: 0.00 ft/s Qm Rating: U
MagVar Method: None (0.00°)	Bottom Est: Power (0.1667)	Rated Area: 0.000 ft ² Diff.: 0.000%
Depth: Composite (BT)	Top Est: Power (0.1667)	Control1: Unspecified
Discharge Method: None		Control2: Unspecified
% Correction: 0.00		Control3: Unspecified
Screening Thresholds:		ADCP:
BT 3-Beam Solution: YES	Max. Vel.: 6.22 ft/s	Type/Freq.: RiverRay / 600 kHz
WT 3-Beam Solution: YES	Max. Depth: 5.08 ft	Serial #: 645650 Firm ware: 44.21
BT Error Vel.: 3.28 ft/s	Mean Depth: 3.09 ft	Bin Size: Auto Blank: 16 cm
WT Error Vel.: 32.81 ft/s	% Meas.: 40.44	BT Mode: Auto BT Pings: Dyn
BT Up Vel.: 32.81 ft/s	Water Temp.: None	WT Mode: Auto WT Pings: Dyn
WT Up Vel.: 32.81 ft/s	ADCP Temp.: 48.9 °F	WZ : 5
Use Weighted Mean Depth: YES		

Performed Diag. Test: NO

Project Name: ldb012521.mmt

Performed Moving Bed Test: NO

Software: 2.22

Performed Compass Calibration: YES Evaluation: YES

Meas. Location:

Tr.#	Edge Distance		#Ens.	Discharge						Width	Area	Time		Mean Vel.		% Bad		
	L	R		Top	Middle	Bottom	Left	Right	Total			Start	End	Boat	Water	Ens.	Bins	
002	L	4	4	193	9.39	8.19	11.1	-3.92	0.883	25.8	38	121	00:24	00:28	0.33	0.21	36	2
003	R	4	4	196	5.12	8.05	4.45	1.24	0.853	19.8	36	117	00:27	00:29	0.25	0.17	27	1
005	R	4	4	191	5.54	9.48	5.05	0.671	-0.141	20.6	36	116	00:31	00:33	0.28	0.18	21	7
006	L	4	4	235	9.85	10.9	5.23	-0.918	-0.530	24.5	50	136	00:35	00:37	0.31	0.18	43	2
Mean	4	4	203	7.48	9.16	6.44	-0.733	0.291	22.6	40	122	Total	00:13	0.29	0.19	32	3	
SD ev	0	0	21	2.49	1.33	3.09	2.31	0.742	2.85	6.8	9.6				0.04	0.02		
SD /M	0.0%	0.0%	10.3%	33.3%	14.6%	47.9%	315.5%	254.5%	12.6%	17.0%	7.8%				12.2%	10.3%		

Figure 5 Discharge Measurement Summary LDB-1

Discharge Measurement Summary

Date Generated: Wed Jan 27 2021

File Information		Site Details										
File Name	LRC0125.WAD	Site Name	LCR									
Start Date and Time		Operator(s)	JTW									
2021/01/25 16:03:55												
System Information		Units	(English Units)									
Sensor Type	FlowTracker	Distance	ft									
Serial #	P4709	Velocity	ft/s									
CPU Firmware Version	3.9	Area	ft^2									
Software Ver	2.30	Discharge	cfs									
Mounting Correction	0.0%											
Discharge Uncertainty		Category	ISO									
Averaging Int.	40	Accuracy	1.0%									
Start Edge	LEW	Depth	0.2%									
Mean SNR	41.4 dB	Velocity	0.5%									
Mean Temp	48.48 °F	Width	0.2%									
Disch. Equation	Mid-Section	Method	2.3%									
		# Stations	3.3%									
		Total Discharge	14.4176									
		Overall	4.2% 4.1%									
Summary												
Averaging Int.	40	# Stations	15									
Start Edge	LEW	Total Width	15.000									
Mean SNR	41.4 dB	Total Area	13.750									
Mean Temp	48.48 °F	Mean Depth	0.917									
Disch. Equation	Mid-Section	Mean Velocity	1.0486									
		Total Discharge	14.4176									
Supplemental Data												
#	Time	Location	Gauge Height	Rated Flow	Comments							
1	Mon Jan 25 16:07:55 CST 2021	5.000	18.760									
Measurement Results												
St	Clock	Loc	Method	Depth	%Dep	MeasD	Vel	CorrFact	MeanV	Area	Flow	%Q
0	16:03	0.00	None	0.000	0.0	0.0	0.0000	1.00	0.0000	0.000	0.0000	0.0
1	16:03	1.00		0.700	0.6	0.280	0.7346	1.00	0.7346	0.700	0.5143	3.6
2	16:04	2.00		1.300	0.6	0.520	0.4823	1.00	0.4823	1.300	0.6269	4.3
3	16:05	3.00		1.400	0.6	0.560	1.0673	1.00	1.0673	1.400	1.4941	10.4
4	16:06	4.00		1.400	0.6	0.560	1.2956	1.00	1.2956	1.400	1.8138	12.6
5	16:08	5.00		1.400	0.6	0.560	1.2694	1.00	1.2694	1.400	1.7770	12.3
6	16:09	6.00		1.400	0.6	0.560	1.1864	1.00	1.1864	1.400	1.6608	11.5
7	16:10	7.00		1.200	0.6	0.480	1.2461	1.00	1.2461	1.200	1.4954	10.4
8	16:11	8.00		1.100	0.6	0.440	1.1709	1.00	1.1709	1.100	1.2881	8.9
9	16:12	9.00		0.900	0.6	0.360	1.1276	1.00	1.1276	0.900	1.0148	7.0
10	16:13	10.00		0.900	0.6	0.360	1.0463	1.00	1.0463	0.900	0.9416	6.5
11	16:14	11.00		0.700	0.6	0.280	0.9580	1.00	0.9580	0.700	0.6707	4.7
12	16:15	12.00		0.600	0.6	0.240	0.8251	1.00	0.8251	0.600	0.4951	3.4
13	16:15	13.00		0.500	0.6	0.200	0.8333	1.00	0.8333	0.750	0.6250	4.3
14	16:15	15.00	None	0.000	0.0	0.0	0.0000	1.00	0.0000	0.000	0.0000	0.0

Rows in italics indicate a QC warning. See the Quality Control page of this report for more information.

Figure 6 Discharge Measurement Summary LRC-1

Discharge Measurement Summary

Date Generated: Wed Jan 27 2021

File Information		Site Details										
File Name	LT0125.WAD	Site Name	LT									
Start Date and Time	2021/01/25 15:18:05	Operator(s)	JTW									
System Information		Discharge Uncertainty										
Sensor Type	FlowTracker	Category	ISO Stats									
Serial #	P4709	Accuracy	1.0% 1.0%									
CPU Firmware Version	3.9	Depth	0.1% 0.9%									
Software Ver	2.30	Velocity	1.1% 4.3%									
Mounting Correction	0.0%	Area	0.1% 0.1%									
		Discharge	cfs									
Summary												
Averaging Int.	40	# Stations	18									
Start Edge	REW	Total Width	20.000									
Mean SNR	28.4 dB	Total Area	46.649									
Mean Temp	48.81 °F	Mean Depth	2.332									
Disch. Equation	Mid-Section	Mean Velocity	0.0623									
		Total Discharge	2.9041									
Supplemental Data												
#	Time	Location	Gauge Height	Rated Flow	Comments							
1	Mon Jan 25 15:22:54 CST 2021	6.000	4.930									
Measurement Results												
St	Clock	Loc	Method	Depth	%Dep	MeasD	Vel	CorrFact	MeanV	Area	Flow	%Q
0	15:18	0.00	None	0.000	0.0	0.0	0.0000	1.00	0.0000	0.000	0.0000	0.0
1	<i>15:18</i>	<i>2.00</i>	<i>0.6</i>	<i>1.300</i>	<i>0.6</i>	<i>0.520</i>	<i>-0.0571</i>	<i>1.00</i>	<i>-0.0571</i>	<i>1.950</i>	<i>-0.1113</i>	<i>-3.8</i>
2	<i>15:19</i>	<i>3.00</i>	<i>0.6</i>	<i>1.800</i>	<i>0.6</i>	<i>0.720</i>	<i>0.0413</i>	<i>1.00</i>	<i>0.0413</i>	<i>1.800</i>	<i>0.0744</i>	<i>2.6</i>
3	<i>15:20</i>	<i>4.00</i>	<i>0.6</i>	<i>2.100</i>	<i>0.6</i>	<i>0.840</i>	<i>0.0751</i>	<i>1.00</i>	<i>0.0751</i>	<i>2.100</i>	<i>0.1578</i>	<i>5.4</i>
4	<i>15:21</i>	<i>5.00</i>	<i>0.6</i>	<i>2.800</i>	<i>0.6</i>	<i>1.120</i>	<i>0.0853</i>	<i>1.00</i>	<i>0.0853</i>	<i>2.800</i>	<i>0.2388</i>	<i>8.2</i>
5	15:23	6.00	0.6	3.000	0.6	1.200	0.0755	1.00	0.0755	3.000	0.2264	7.8
6	15:24	7.00	0.6	3.200	0.6	1.280	0.0748	1.00	0.0748	3.200	0.2394	8.2
7	15:25	8.00	0.6	3.200	0.6	1.280	0.0791	1.00	0.0791	3.200	0.2530	8.7
8	15:26	9.00	0.6	3.300	0.6	1.320	0.0909	1.00	0.0909	3.300	0.2999	10.3
9	15:27	10.00	0.6	3.300	0.6	1.320	0.0951	1.00	0.0951	3.300	0.3140	10.8
10	15:28	11.00	0.6	3.300	0.6	1.320	0.0938	1.00	0.0938	3.300	0.3096	10.7
11	<i>15:29</i>	<i>12.00</i>	<i>0.6</i>	<i>3.200</i>	<i>0.6</i>	<i>1.280</i>	<i>0.0515</i>	<i>1.00</i>	<i>0.0515</i>	<i>3.200</i>	<i>0.1648</i>	<i>5.7</i>
12	<i>15:30</i>	<i>13.00</i>	<i>0.6</i>	<i>3.000</i>	<i>0.6</i>	<i>1.200</i>	<i>0.0449</i>	<i>1.00</i>	<i>0.0449</i>	<i>3.000</i>	<i>0.1348</i>	<i>4.6</i>
13	<i>15:31</i>	<i>14.00</i>	<i>0.6</i>	<i>2.800</i>	<i>0.6</i>	<i>1.120</i>	<i>0.0548</i>	<i>1.00</i>	<i>0.0548</i>	<i>2.800</i>	<i>0.1534</i>	<i>5.3</i>
14	15:32	15.00	0.6	2.700	0.6	1.080	0.0597	1.00	0.0597	2.700	0.1612	5.6
15	15:33	16.00	0.6	2.400	0.6	0.960	0.0564	1.00	0.0564	2.400	0.1354	4.7
16	<i>15:34</i>	<i>17.00</i>	<i>0.6</i>	<i>2.300</i>	<i>0.6</i>	<i>0.920</i>	<i>0.0331</i>	<i>1.00</i>	<i>0.0331</i>	<i>4.600</i>	<i>0.1524</i>	<i>5.2</i>
17	15:34	20.00	None	0.000	0.0	0.0	0.0000	1.00	0.0000	0.000	0.0000	0.0

Rows in italics indicate a QC warning. See the Quality Control page of this report for more information.

Figure 7 Discharge Measurement Summary LT-1

Discharge Measurement Summary

Date Generated: Wed Jan 27 2021

File Information

File Name	TE0125.WAD
Start Date and Time	2021/01/25 17:44:26

Site Details

Site Name	TE
Operator(s)	JTW

System Information

Sensor Type	FlowTracker
Serial #	P4709
CPU Firmware Version	3.9
Software Ver	2.30
Mounting Correction	0.0%

Units (English Units)

Distance	ft
Velocity	ft/s
Area	ft^2
Discharge	cfs

Discharge Uncertainty

Category	ISO	Stats
Accuracy	1.0%	1.0%
Depth	0.3%	7.0%
Velocity	1.6%	5.5%
Width	0.2%	0.2%
Method	3.3%	-
# Stations	4.6%	-
Overall	6.0%	9.0%

Summary

Averaging Int.	40	# Stations	11
Start Edge	LEW	Total Width	11.000
Mean SNR	37.7 dB	Total Area	10.100
Mean Temp	48.06 °F	Mean Depth	0.918
Disch. Equation	Mid-Section	Mean Velocity	0.3385
		Total Discharge	3.4188

Supplemental Data

#	Time	Location	Gauge Height	Rated Flow	Comments
1	Mon Jan 25 17:46:48 CST 2021	4.000	11.560		

Measurement Results

St	Clock	Loc	Method	Depth	%Dep	MeasD	Vel	CorrFact	MeanV	Area	Flow	%Q
0	17:44	0.00	None	0.000	0.0	0.0	0.0000	1.00	0.0000	0.000	0.0000	0.0
1	17:45	2.00	0.6	1.200	0.6	0.480	0.3104	1.00	0.3104	1.800	0.5587	16.3
2	17:47	3.00	0.6	1.100	0.6	0.440	0.4278	1.00	0.4278	1.100	0.4706	13.8
3	17:48	4.00	0.6	1.400	0.6	0.560	0.5804	1.00	0.5804	1.400	0.8125	23.8
4	17:49	5.00	0.6	1.300	0.6	0.520	0.6893	1.00	0.6893	1.300	0.8960	26.2
5	17:50	6.00	0.6	0.900	0.6	0.360	0.4852	1.00	0.4852	0.900	0.4367	12.8
6	17:52	7.00	0.6	1.200	0.6	0.480	0.2621	1.00	0.2621	1.200	0.3146	9.2
7	17:53	8.00	0.6	1.000	0.6	0.400	0.0840	1.00	0.0840	1.000	0.0840	2.5
8	17:54	9.00	0.6	1.000	0.6	0.400	-0.0938	1.00	-0.0938	1.000	-0.0938	-2.7
9	17:56	10.00	0.6	0.400	0.6	0.160	-0.1512	1.00	-0.1512	0.400	-0.0605	-1.8
10	17:56	11.00	None	0.000	0.0	0.0	0.0000	1.00	0.0000	0.000	0.0000	0.0

Rows in italics indicate a QC warning. See the Quality Control page of this report for more information.

Figure 8 Discharge Measurement Summary TE-1

Discharge Measurement Summary

Date Generated: Wed Jan 27 2021

File Information				Site Details								
File Name	TG0125.WAD	Site Name	TG	Start Date and Time	2021/01/25 18:17:30	Operator(s)	JTW					
System Information		Units (English Units)		Discharge Uncertainty								
Sensor Type	FlowTracker	Distance	ft	Category	ISO	Stats						
Serial #	P4709	Velocity	ft/s	Accuracy	1.0%	1.0%						
CPU Firmware Version	3.9	Area	ft^2	Depth	0.2%	0.9%						
Software Ver	2.30	Discharge	cfs	Velocity	0.5%	1.0%						
Mounting Correction	0.0%			Width	0.1%	0.1%						
				Method	1.9%	-						
				# Stations	2.5%	-						
				Overall	3.3%	1.7%						
Summary												
Averaging Int.	40	# Stations	20									
Start Edge	LEW	Total Width	19.000									
Mean SNR	38.5 dB	Total Area	18.100									
Mean Temp	47.73 °F	Mean Depth	0.953									
Disch. Equation	Mid-Section	Mean Velocity	1.1563									
		Total Discharge	20.9281									
Supplemental Data												
#	Time	Location	Gauge Height	Rated Flow	Comments							
1	Mon Jan 25 18:18:28 CST 2021	2.000	9.630									
Measurement Results												
St	Clock	Loc	Method	Depth	%Dep	MeasD	Vel	CorrFact	MeanV	Area	Flow	%Q
0	18:17	0.00	None	0.000	0.0	0.0	0.0000	1.00	0.0000	0.000	0.0000	0.0
1	18:17	1.00		1.400	0.6	0.560	1.0627	1.00	1.0627	1.400	1.4877	7.1
2	<i>18:18</i>	<i>2.00</i>	<i>0.6</i>	<i>1.500</i>	<i>0.6</i>	<i>0.600</i>	<i>1.0505</i>	<i>1.00</i>	<i>1.0505</i>	<i>1.500</i>	<i>1.5758</i>	<i>7.5</i>
3	18:19	3.00	0.6	1.500	0.6	0.600	1.2195	1.00	1.2195	1.500	1.8292	8.7
4	18:21	4.00	0.6	1.300	0.6	0.520	1.2011	1.00	1.2011	1.300	1.5613	7.5
5	18:22	5.00	0.6	1.200	0.6	0.480	1.1394	1.00	1.1394	1.200	1.3675	6.5
6	18:23	6.00	0.6	1.100	0.6	0.440	1.2618	1.00	1.2618	1.100	1.3881	6.6
7	18:24	7.00	0.6	1.000	0.6	0.400	1.3005	1.00	1.3005	1.000	1.3005	6.2
8	18:25	8.00	0.6	1.000	0.6	0.400	1.2700	1.00	1.2700	1.000	1.2700	6.1
9	18:26	9.00	0.6	1.000	0.6	0.400	1.2661	1.00	1.2661	1.000	1.2661	6.0
10	18:27	10.00	0.6	0.900	0.6	0.360	1.3698	1.00	1.3698	0.900	1.2327	5.9
11	18:28	11.00	0.6	0.900	0.6	0.360	1.3412	1.00	1.3412	0.900	1.2070	5.8
12	18:29	12.00	0.6	0.900	0.6	0.360	1.2080	1.00	1.2080	0.900	1.0871	5.2
13	18:30	13.00	0.6	0.800	0.6	0.320	1.1421	1.00	1.1421	0.800	0.9135	4.4
14	18:31	14.00	0.6	0.800	0.6	0.320	1.1919	1.00	1.1919	0.800	0.9534	4.6
15	18:32	15.00	0.6	0.800	0.6	0.320	1.0896	1.00	1.0896	0.800	0.8715	4.2
16	18:33	16.00	0.6	0.700	0.6	0.280	0.8940	1.00	0.8940	0.700	0.6259	3.0
17	18:34	17.00	0.6	0.700	0.6	0.280	0.8068	1.00	0.8068	0.700	0.5648	2.7
18	18:35	18.00	0.6	0.600	0.6	0.240	0.7100	1.00	0.7100	0.600	0.4260	2.0
19	18:35	19.00	None	0.000	0.0	0.0	0.0000	1.00	0.0000	0.000	0.0000	0.0

Rows in italics indicate a QC warning. See the Quality Control page of this report for more information.

Figure 9 Discharge Measurement Summary TG-1

Discharge Measurement Summary

Date Generated: Wed Jan 27 2021

File Information

File Name	URC0125.WAD
Start Date and Time	2021/01/25 16:40:57

Site Details

Site Name	URC
Operator(s)	JTW

System Information

Sensor Type	FlowTracker
Serial #	P4709
CPU Firmware Version	3.9
Software Ver	2.30
Mounting Correction	0.0%

Units (English Units)

Distance	ft
Velocity	ft/s
Area	ft^2
Discharge	cfs

Discharge Uncertainty

Category	ISO	Stats
Accuracy	1.0%	1.0%
Depth	0.2%	2.1%
Velocity	0.7%	2.9%
Width	0.2%	0.2%
Method	2.5%	-
# Stations	3.9%	-
Overall	4.8%	3.7%

Summary

Averaging Int.	40	# Stations	13
Start Edge	LEW	Total Width	13.000
Mean SNR	40.0 dB	Total Area	11.300
Mean Temp	46.98 °F	Mean Depth	0.869
Disch. Equation	Mid-Section	Mean Velocity	0.6193
		Total Discharge	6.9977

Supplemental Data

#	Time	Location	Gauge Height	Rated Flow	Comments
1	Mon Jan 25 16:52:27 CST 2021	14.00	12.160		

Measurement Results

St	Clock	Loc	Method	Depth	%Dep	MeasD	Vel	CorrFact	MeanV	Area	Flow	%Q
0	16:40	1.00	None	0.000	0.0	0.0	0.0000	1.00	0.0000	0.000	0.0000	0.0
1	<i>16:40</i>	<i>3.00</i>	<i>0.6</i>	<i>0.400</i>	<i>0.6</i>	<i>0.160</i>	<i>0.0000</i>	<i>1.00</i>	<i>0.0000</i>	<i>0.600</i>	<i>0.0000</i>	<i>0.0</i>
2	<i>16:42</i>	<i>4.00</i>	<i>0.6</i>	<i>0.800</i>	<i>0.6</i>	<i>0.320</i>	<i>0.3796</i>	<i>1.00</i>	<i>0.3796</i>	<i>0.800</i>	<i>0.3036</i>	<i>4.3</i>
3	<i>16:43</i>	<i>5.00</i>	<i>0.6</i>	<i>1.000</i>	<i>0.6</i>	<i>0.400</i>	<i>0.4567</i>	<i>1.00</i>	<i>0.4567</i>	<i>1.000</i>	<i>0.4567</i>	<i>6.5</i>
4	<i>16:44</i>	<i>6.00</i>	<i>0.6</i>	<i>1.000</i>	<i>0.6</i>	<i>0.400</i>	<i>0.5020</i>	<i>1.00</i>	<i>0.5020</i>	<i>1.000</i>	<i>0.5020</i>	<i>7.2</i>
5	16:45	7.00	0.6	1.000	0.6	0.400	0.5692	1.00	0.5692	1.000	0.5692	8.1
6	16:46	8.00	0.6	1.100	0.6	0.440	0.7005	1.00	0.7005	1.100	0.7706	11.0
7	16:47	9.00	0.6	1.000	0.6	0.400	0.8825	1.00	0.8825	1.000	0.8825	12.6
8	16:48	10.00	0.6	1.100	0.6	0.440	0.8993	1.00	0.8993	1.100	0.9893	14.1
9	16:49	11.00	0.6	1.300	0.6	0.520	0.9012	1.00	0.9012	1.300	1.1715	16.7
10	16:50	12.00	0.6	1.300	0.6	0.520	0.7172	1.00	0.7172	1.300	0.9323	13.3
11	16:51	13.00	0.6	1.100	0.6	0.440	0.3819	1.00	0.3819	1.100	0.4201	6.0
12	16:51	14.00	None	0.000	0.0	0.0	0.0000	1.00	0.0000	0.000	0.0000	0.0

Rows in italics indicate a QC warning. See the Quality Control page of this report for more information.

Figure 10 Discharge Measurement Summary URC-2

Discharge Measurement Summary

Date Generated: Wed Jan 27 2021

File Information

File Name	WC0125.WAD
Start Date and Time	2021/01/25 17:14:27

Site Details

Site Name	WC
Operator(s)	JTW

System Information

Sensor Type	FlowTracker
Serial #	P4709
CPU Firmware Version	3.9
Software Ver	2.30
Mounting Correction	0.0%

Units	(English Units)
Distance	ft
Velocity	ft/s
Area	ft^2
Discharge	cfs

Discharge Uncertainty

Category	ISO	Stats
Accuracy	1.0%	1.0%
Depth	0.5%	3.1%
Velocity	0.9%	6.7%
Width	0.2%	0.2%
Method	2.4%	-
# Stations	4.2%	-
Overall	5.1%	7.4%

Summary

Averaging Int.	40	# Stations	12
Start Edge	LEW	Total Width	11.000
Mean SNR	31.7 dB	Total Area	6.500
Mean Temp	48.47 °F	Mean Depth	0.591
Disch. Equation	Mid-Section	Mean Velocity	0.9098
		Total Discharge	5.9139

Supplemental Data

#	Time	Location	Gauge Height	Rated Flow	Comments
1	Mon Jan 25 17:28:10 CST 2021	11.000	8.240		

Measurement Results

St	Clock	Loc	Method	Depth	%Dep	MeasD	Vel	CorrFact	MeanV	Area	Flow	%Q
0	17:14	0.00	None	0.000	0.0	0.0	0.0000	1.00	0.0000	0.000	0.0000	0.0
1	17:14	1.00		0.500	0.6	0.200	1.0282	1.00	1.0282	0.500	0.5141	8.7
2	17:15	2.00	0.6	0.500	0.6	0.200	1.0072	1.00	1.0072	0.500	0.5036	8.5
3	17:16	3.00	0.6	0.600	0.6	0.240	1.0144	1.00	1.0144	0.600	0.6087	10.3
4	17:17	4.00	0.6	0.600	0.6	0.240	0.5443	1.00	0.5443	0.600	0.3266	5.5
5	17:18	5.00	0.6	0.700	0.6	0.280	1.0351	1.00	1.0351	0.700	0.7247	12.3
6	17:19	6.00	0.6	0.900	0.6	0.360	0.8432	1.00	0.8432	0.900	0.7588	12.8
7	17:20	7.00	0.6	0.800	0.6	0.320	0.8432	1.00	0.8432	0.800	0.6744	11.4
8	17:21	8.00	0.6	0.800	0.6	0.320	0.9580	1.00	0.9580	0.800	0.7663	13.0
9	17:22	9.00	0.6	0.700	0.6	0.280	0.9455	1.00	0.9455	0.700	0.6620	11.2
10	17:23	10.00	0.6	0.400	0.6	0.160	0.9367	1.00	0.9367	0.400	0.3746	6.3
11	17:23	11.00	None	0.000	0.0	0.0	0.0000	1.00	0.0000	0.000	0.0000	0.0

Rows in italics indicate a QC warning. See the Quality Control page of this report for more information.

Figure 11 Discharge Measurement Summary WC-1

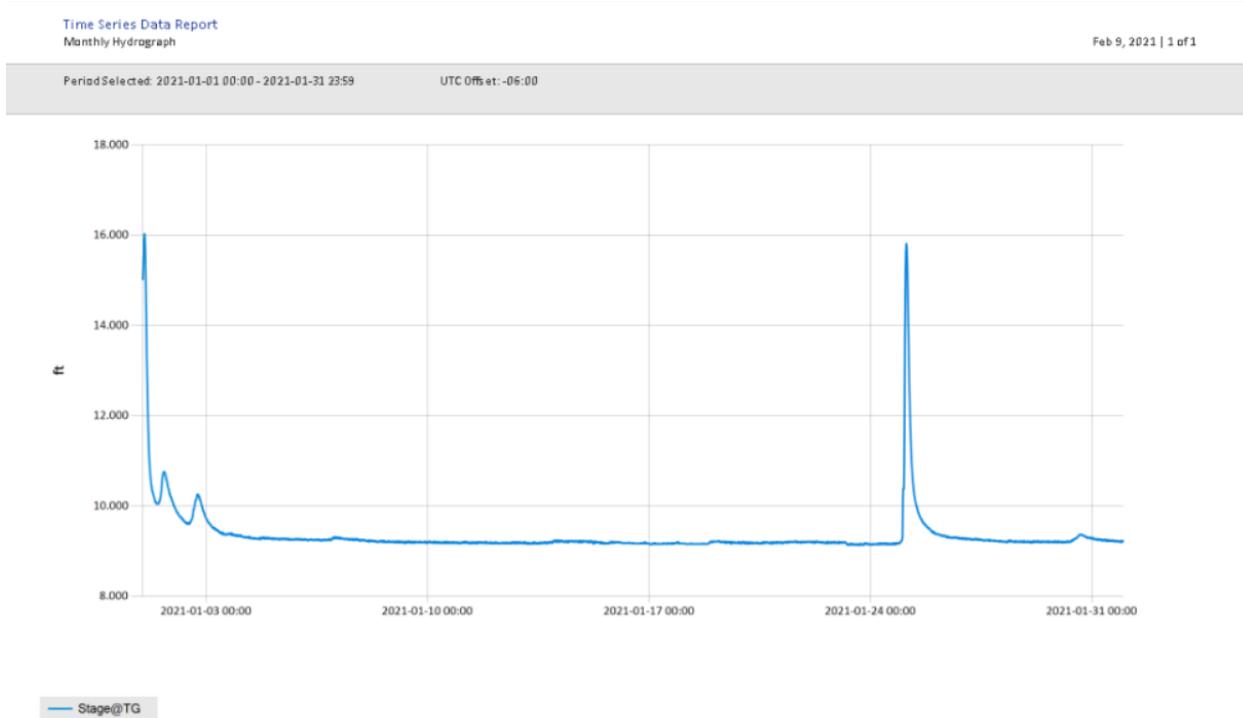


Figure 12 Monthly Hydrograph TG-1

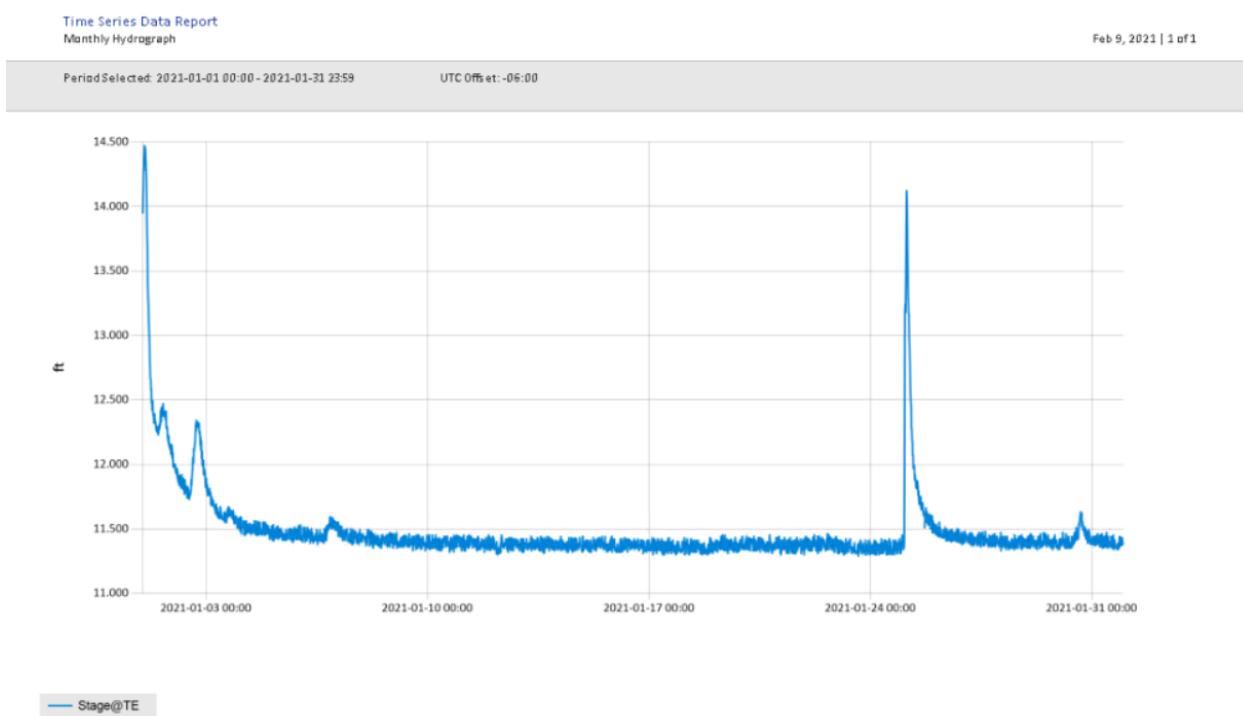


Figure 13 Monthly Hydrograph TE-1

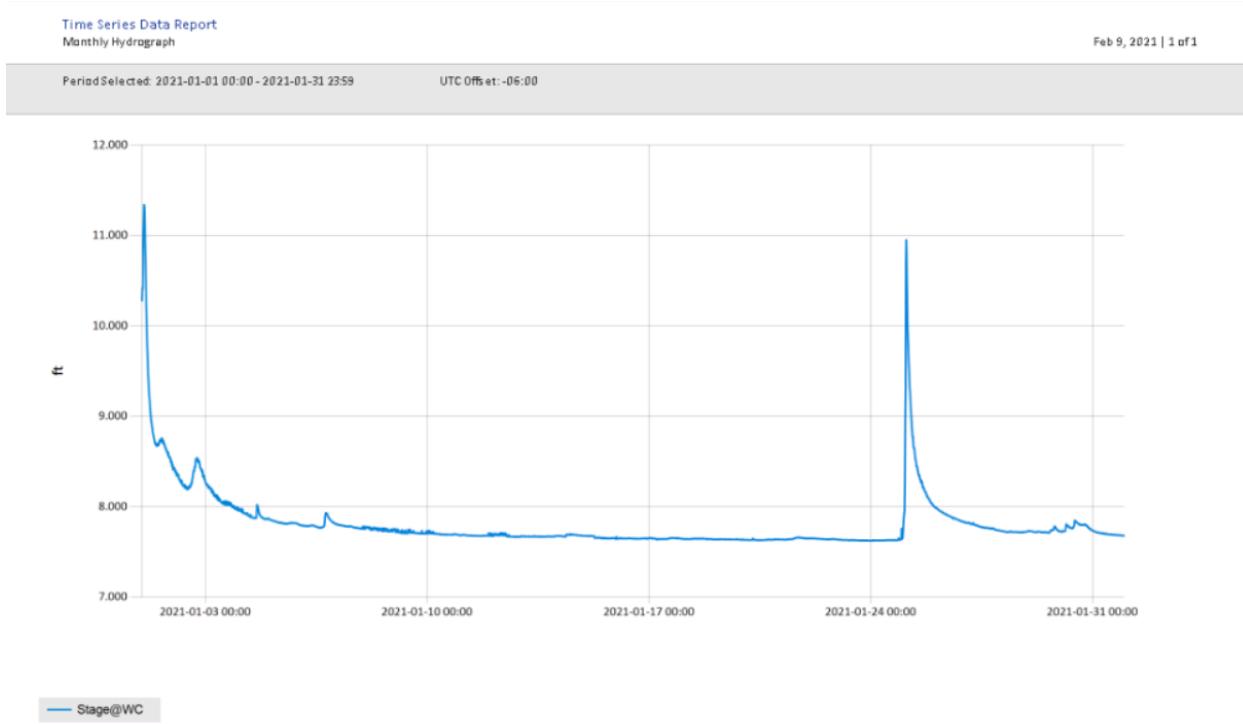


Figure 14 Monthly Hydrograph WC-1

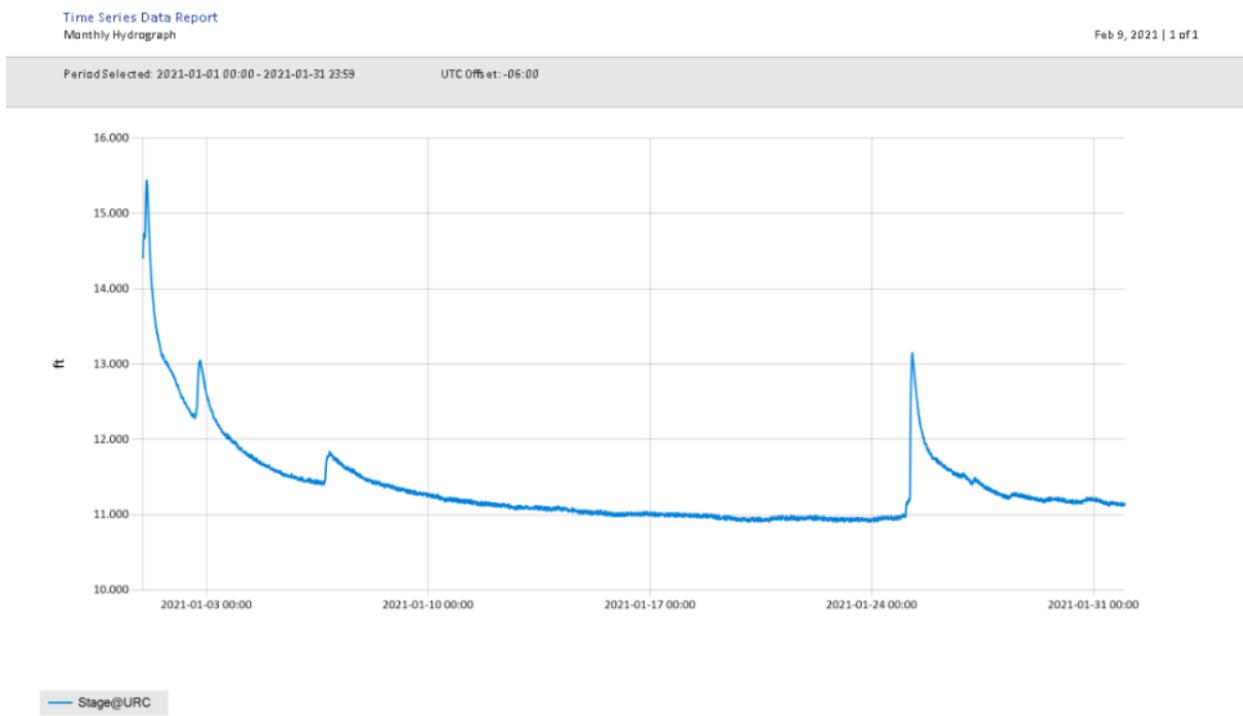


Figure 15 Monthly Hydrograph URC-2

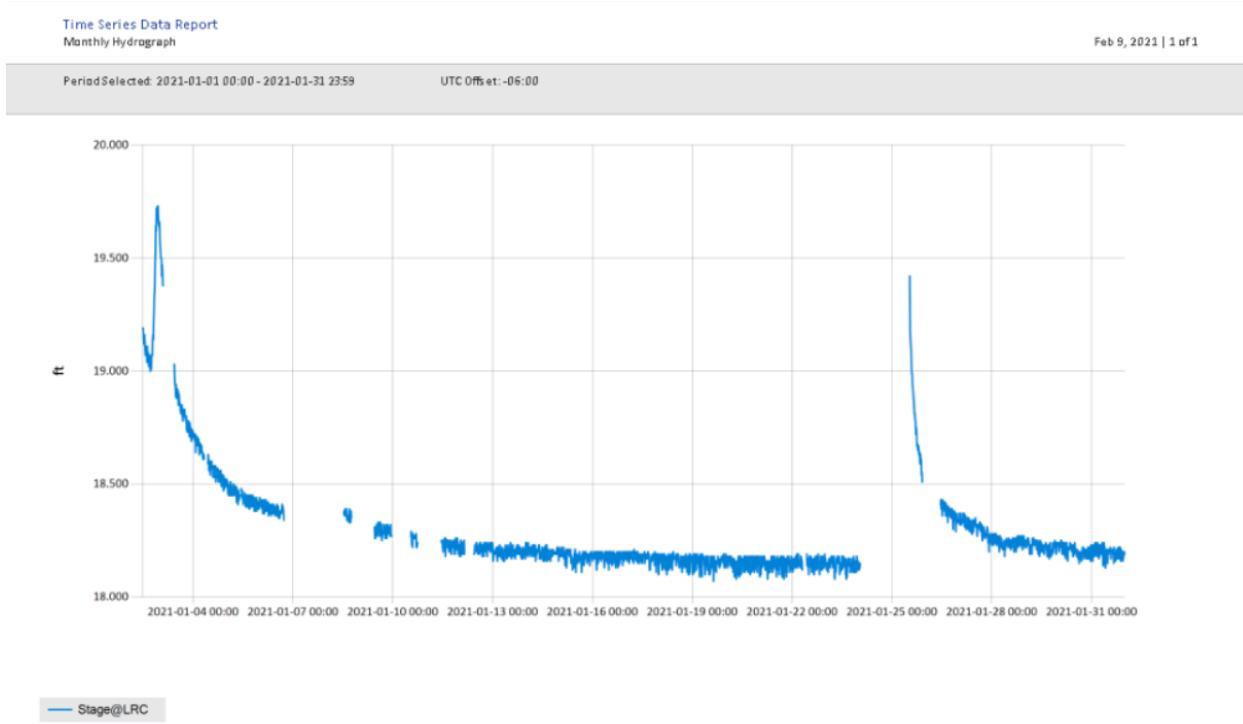


Figure 16 Monthly Hydrograph LRC-1

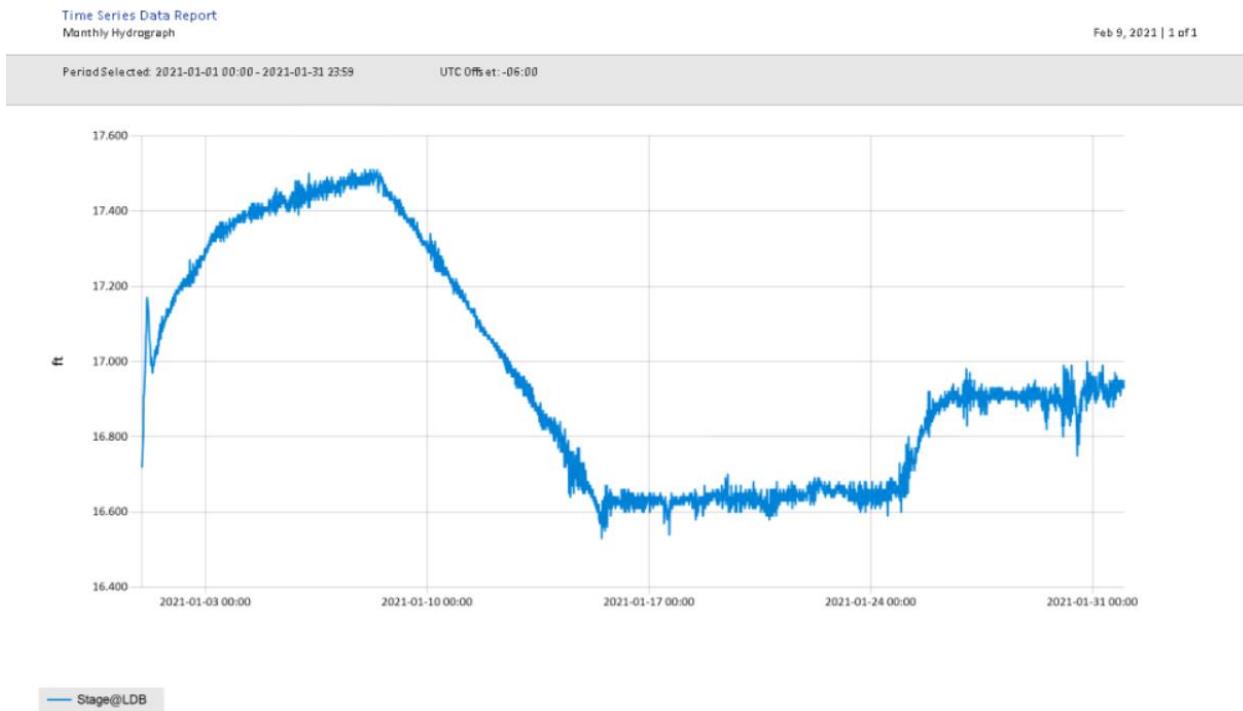


Figure 17 Monthly Hydrograph LDB-1

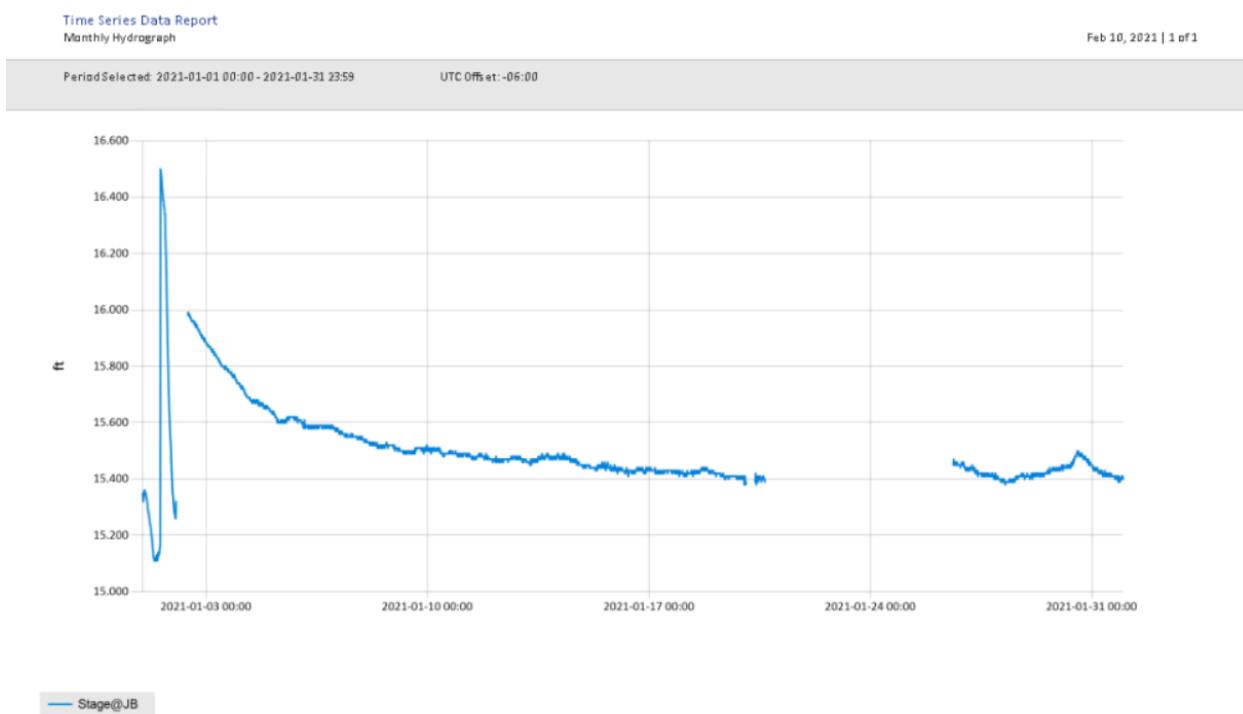


Figure 18 Monthly Hydrograph JB-1

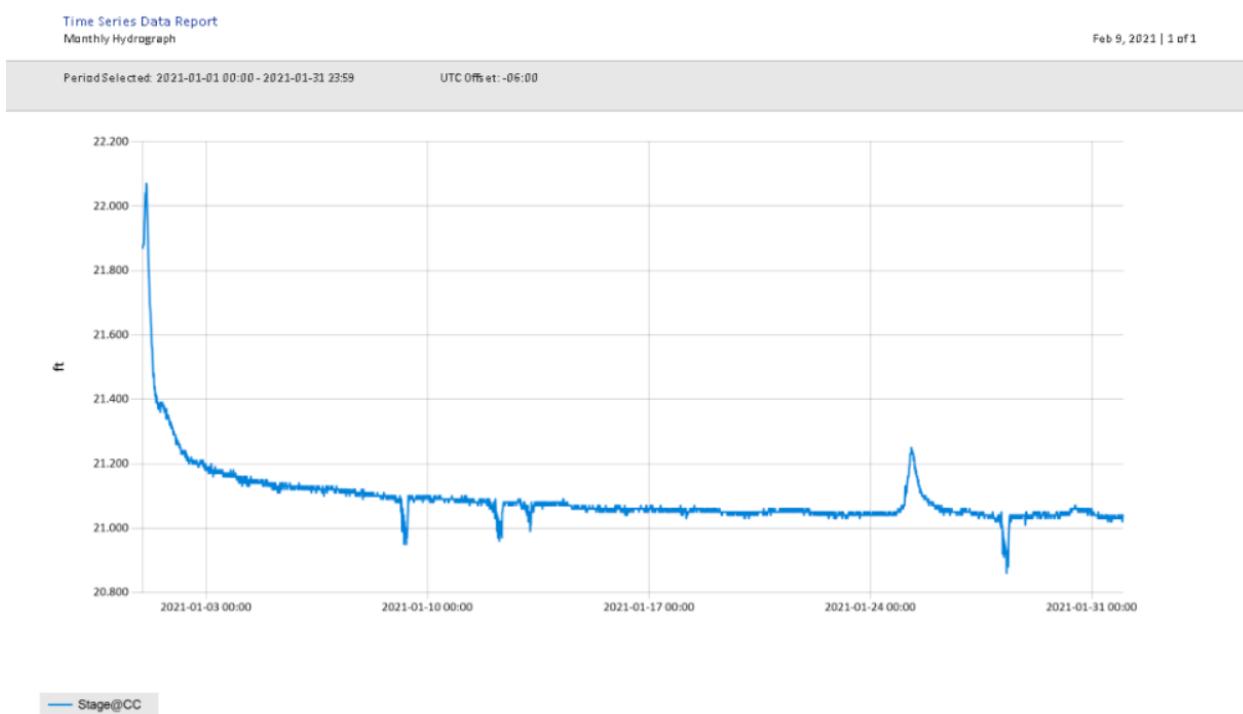


Figure 19 Monthly Hydrograph CC-1

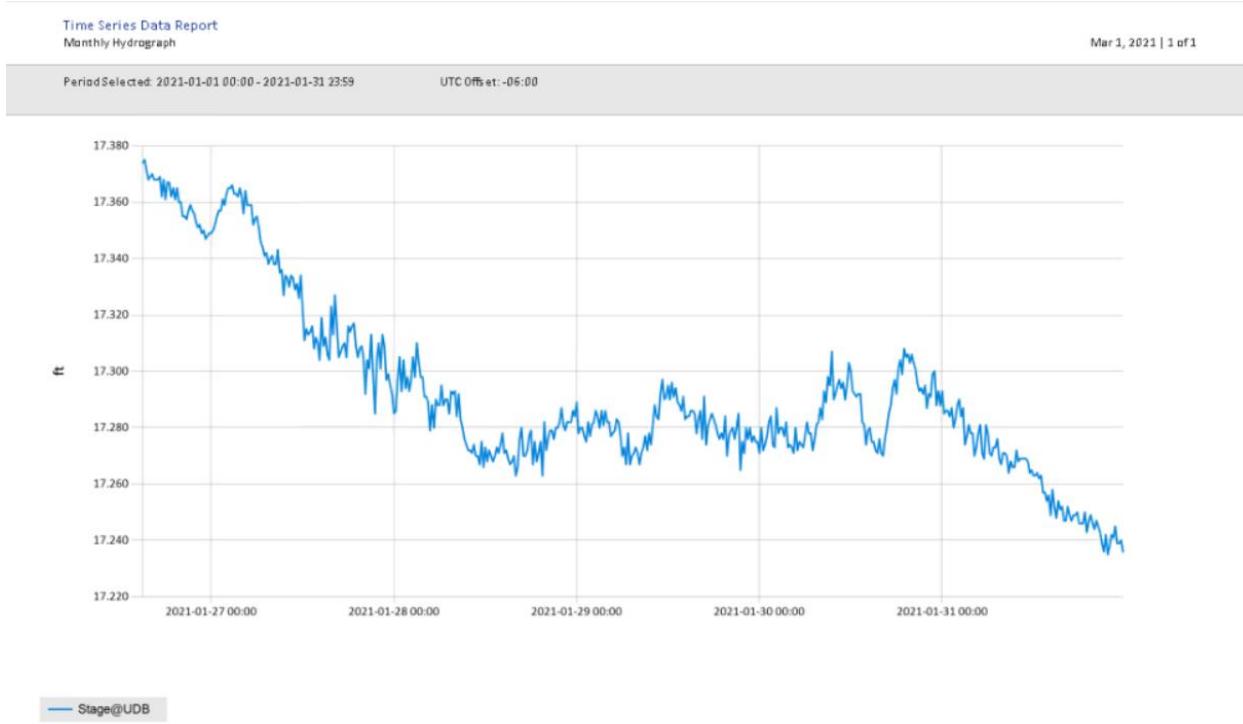


Figure 20 Monthly Hydrograph UDB-1

MESONET CLIMATOLOGICAL DATA SUMMARY (NRMN) Norman Latitude: 35-14-09									January 2021 Nearest City: 2.1 NW Norman Longitude: 97-27-53						Time Zone: Midnight-Midnight CST County: Cleveland Elevation: 1171 feet					
DAY	TEMPERATURE (°F)				DEG DAYS		HUMIDITY (%)			RAIN (in)	PRESSURE (in)		WIND SPEED (mph)	SOLAR (MJ/m²)	4" SOIL TEMPERATURES					
	MAX	MIN	AVG	DEWPT	HDD	CDD	MAX	MIN	AVG		STN	MSL			SOD	BARE	MAX	MIN		
1	36	31	32.8	30.6	32	0	99	76	91	0.47	28.67	29.91	NNW*	NA	20.2*	4.61	40.9	39.0	40	38
2	45	32	36.9	30.6	26	0	88	59	78	0.36	28.83	30.09	SE	4.9	11.7	9.76	41.2	41.3	45	39
3	46	28	36.8	31.4	28	0	97	61	81	0.02	28.70	29.94	SSE	4.1	13.2	12.16	41.5	43.0	47	40
4	57	28	41.1	33.5	22	0	97	47	77	0.00	28.84	30.09	NNW	5.0	22.9	11.88	41.4	43.4	48	40
5	59	28	44.7	32.8	21	0	98	34	67	0.01	28.81	30.06	SSE	7.5	21.9	11.85	41.7	43.7	48	39
6	51	40	45.5	37.5	19	0	93	55	74	0.08	28.71	29.96	NNW	10.5	23.7	1.56	43.9	44.5	45	43
7	42	38	39.4	36.3	25	0	95	77	89	0.00	28.89	30.14	NNW	11.3	25.2	1.75	43.7	42.4	43	42
8	41	25	35.1	28.9	32	0	94	62	78	0.00	29.07	30.33	N	7.6	17.9	8.33	43.5	41.2	45	39
9	43	22	32.7	25.5	33	0	96	52	77	0.01	29.08	30.34	NNE	2.8	11.3	9.75	40.9	38.5	42	36
10	39	30	33.7	27.2	30	0	88	60	77	0.00	29.11	30.37	NNE	6.9	16.7	5.48	41.4	38.1	41	36
11	47*	24*	35.8*	24.4*	29*	0*	88*	41*	65*	0.00*	29.11*	30.37*	W *	3.8*	12.1*	12.66*	41.5*	39.3*	45*	36*
12	53	26	38.3	27.8	26	0	93	35	68	0.00	29.01	30.26	SSW	5.3	14.2	13.24	40.6	39.1	45	36
13	62	26	41.6	28.9	21	0	96	22	66	0.00	28.72	29.97	SSW	7.5	26.2	12.69	40.9	39.2	44	36
14	54	32	44.9	23.1	22	0	86	20	46	0.00	28.66	29.91	NNW	14.6	42.4	12.35	42.2	40.0	44	37
15	46	31	39.3	14.9	26	0	62	25	37	0.00	28.75	29.99	NW	17.3	42.8	11.81	41.3	37.5	40	36
16	52	26	37.1	18.4	26	0	74	21	50	0.00	28.77	30.02	W	6.7	16.3	9.79	40.7	37.0	41	34
17	55	30	43.0	22.4	23	0	70	22	47	0.00	28.80	30.05	NW	9.3	32.4	11.88	41.7	39.4	44	37
18	62	31	45.8	26.6	18	0	67	34	48	0.00	28.74	29.98	S	8.6	24.4	11.62	41.6	40.5	46	35
19	49	30	41.7	26.3	25	0	73	37	55	0.00	29.12	30.38	N	8.9	23.2	10.23	43.5	43.5	47	41
20	45	26	37.9	29.9	29	0	90	51	74	0.00	28.97	30.23	SSW	7.2	28.5	2.87	41.6	40.0	42	38
21	50	38	44.5	41.1	21	0	98	74	88	0.00	28.69	29.94	E	4.4	13.6	4.95	43.3	42.9	46	41
22	55	38	44.7	32.7	18	0	96	38	66	0.00	28.80	30.05	NE	8.5	18.8	13.62	44.8	45.8	51	42
23	49	37	44.1	36.5	22	0	98	54	75	0.00	28.76	30.01	SSE	8.9	21.2	3.77	44.6	44.9	47	43
24	51	44	47.4	45.7	17	0	99	77	94	0.16	28.64	29.88	S	8.0	18.0	2.84	46.2	47.1	48	46
25	58	33	44.6	40.3	19	0	99	51	86	0.68	28.43	29.66	NNW	11.0	30.4	9.34	46.7	47.6	51	46
26	39	27	32.3	25.9	32	0	88	62	77	0.00	28.73	29.98	N	9.0	23.7	10.83	44.3	44.1	47	42
27	38	23	31.1	22.8	34	0	86	50	72	0.00	29.09	30.34	N	10.3	25.5	11.19	42.9	41.6	45	39
28	47	19	32.5	23.3	32	0	93	44	70	0.00	29.22	30.49	SSE	6.1	17.0	12.98	40.7	39.3	44	37
29	57	33	44.9	33.9	20	0	88	45	67	0.00	28.86	30.11	S	11.4	31.0	9.08	42.2	40.6	44	36
30	68	39	54.3	42.4	11	0	97	31	68	0.07	28.46	29.70	S	17.2	40.0	12.38	46.1	47.4	52	44
31	49	31	39.8	30.3	25	0	91	51	70	0.00	29.00	30.25	NNW	15.8	33.7	14.80	45.1	43.6	47	41
	50*	31*	40.1*	30.0*	<- Monthly Averages ->				28.84*	30.09*	NNW*	8.7*	42.8*	9.42*	42.7*	41.8*	45*	39*		
Temperature - Highest: 68* Lowest: 19*					Degree Days - Total HDD: 768* Total CDD: 0*					Number of Days With: Tmax ≥ 90: 0* Rainfall ≥ 0.01 inch: 9* Tmax ≤ 32: 0* Rainfall ≥ 0.10 inch: 4* Tmin ≤ 32: 22* Avg Wind Speed ≥ 10 mph: 9* Tmin ≤ 0: 0* Max Wind Speed ≥ 30 mph: 7*										
Rainfall: Monthly Total: 1.86* in. Greatest 24 Hr: 0.68* in.					Humidity - Highest: 99* Lowest: 20*															

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* Denotes incomplete record

Figure 21 January Mesonet Data